



Rubber nipples

Notes

Pay Bashford my bill and

Major McEllan's

Candy

~~Habit~~

$6 = 2989 \quad 4470 \quad 1239 \quad 465 \quad 373 \quad 333 \quad 350$   
 $9 = 4471 \quad 6573 \quad 1829 \quad 689 \quad 538 \quad 483 \quad 528$   
 $1 = 505 \quad 760 \quad 210 \quad 85 \quad 60 \quad 55 \quad 58$

16 males from the S.W.

$16 = 498 \quad 738 \quad 205 \quad 77 \quad 60.7 \quad 54 \quad 58$  average of 16.

$$\begin{array}{r}
 16 \overline{) 7963498} \quad 11808 \\
 \underline{64} \\
 156 \\
 \underline{144} \\
 125 \\
 \underline{128}
 \end{array}$$

$$\begin{array}{r}
 16 \overline{) 11808} \quad 738 \\
 \underline{112} \\
 60 \\
 \underline{48} \\
 128 \\
 \underline{128}
 \end{array}$$

$$\begin{array}{r}
 16 \overline{) 3278} \quad 205 \\
 \underline{32} \\
 78 \\
 \underline{80}
 \end{array}$$

$$\begin{array}{r}
 16 \overline{) 971} \quad 60.7 \\
 \underline{96} \\
 110
 \end{array}$$

$$\begin{array}{r}
 16 \overline{) 1239} \quad 77 \\
 \underline{112} \\
 119 \\
 \underline{112} \\
 7
 \end{array}$$

$$\begin{array}{r}
 16 \overline{) 871} \quad 54 \\
 \underline{80} \\
 71 \\
 \underline{64} \\
 76 \\
 \underline{76}
 \end{array}$$

$$\begin{array}{r}
 16 \overline{) 936} \quad 58.5 \\
 \underline{88} \\
 136 \\
 \underline{128} \\
 80 \\
 \underline{80}
 \end{array}$$

485	740	207	79	59	55	58
507	755	212	78	63	56	60
502	763	207	75	62	56	59
495	745	207	79	62	54	56
500	718	196	77	64	55	59
500	754	210	77	63	57	58
6)2989	4475	1239	465	373	333	350

498 746 207 78 62 56 58  
 length stretch wing tail Culm tarsus rate  
 Average of 6 males from the Colorado Desert.

484	720	202	77	58	53	54
485	720	196	78	61	55	53
500	740	210	85	61	54	57
484	760	205	76	63	54	54
4)1953	2940	813	316	243	216	218
488	735	203	79	61	54	55

Average of 4 females from the Colorado Desert.

451	679	183	76	58	51	52.3	8.64
Average of five females from the Hudson Highlands							

630	511	740	203	80	62	52	58
580	465	715	200	70	57	54	60
635	515	725	200	71	63	55	57
640	515	740	204	80	60	55	61
625	503	760	206	75	63	55	61
590	522	760	206	77	57	54	59
610	480	720	206	84	59	53	56
625	492	740	212	77	59	54	60
575	508	748	192	77	58	51	56
475	685			75			
9)4471	9)6573	9)1829		689	538	33	528
496.7	730.3	203.2		76.6	59.8	53.7	58.7

Average of 9 adult males from the Verde River,  
 central Arizona.

487	745	200	75	61	64	59
500	715	197	76	65	52	58
487	745	203	75	60	54	57
485	735	200	78	59	55	59

$$\begin{array}{r} 180 \quad 730 \\ \hline 1959 \quad 2940 \quad 1800 \quad 4304 \quad 245 \quad 215 \quad 233 \\ \hline 489.8 \quad 735 \quad 208 \quad 76 \quad 61.1 \quad 54 \quad 58.1 \end{array}$$

$$\begin{array}{r}
 1745 \\
 254 \\
 \hline
 7106 \\
 8875 \\
 \hline
 3550 \\
 450.85-0 \\
 \hline
 679.450 \\
 5356 \\
 13345 \\
 \hline
 10700 \\
 254 \\
 \hline
 26.75- \\
 254 \\
 \hline
 182626 \\
 1778 \\
 254 \\
 \hline
 2286 \\
 719 \\
 \hline
 254 \\
 254 \\
 \hline
 508 \\
 254 \\
 \hline
 228 \\
 2032 \\
 508 \\
 \hline
 52324 \\
 508 \\
 254 \\
 \hline
 1016 \\
 762 \\
 \hline
 254 \\
 34 \\
 \hline
 4536
 \end{array}$$



4 = 1953      2940      813      316      243      216      218

~~4 = 490      735      200      76      61      54~~

4 = 1959      2940      800      304      245      215      233

8) 3912      5880      1613      620      488      431      451  
     489      735      202      78      61      54      56

average of 8 adult females, one Arizona the Southwestern U.S.

Average of 4 " " " " " Eastern U.S.  
     451      679      183      76      58      51

	Length	Alar expanse	Wing	Tail	Culmen	Tarsus	Middle toe and claw
16 males from W. U.S.	498	738	205	77	60.7	54	58
1 " " E. U.S.	480	705	197	75	64.0	54	56
8 females from W. U.S.	489	735	202	78	61	54	56
4 " " E. U.S.	451	679	183	76	58	51	

Throat on side of neck. - Thin, throat -

(1) median line of neck buffy white marked with  
irregular spots of black and much obscured by  
brown below, and becoming absolutely below

(2) similar frazari (5) similar; sometimes more rich (5)

(3) white pure, and more extensive, with fewer and  
brownish black spots; white extending to the end of  
the pectoral fin. Col. Desert

(4) white area absolutely on whole of neck & thin  
brunneus

(6) arrow-shaped spots fine + brown, white extending  
brunneus

Bill. - (1) Median size, rather stout (brunneus).

(2) Longer, more slender (1 spec. frazari)

(3) About as in brunneus (brunneus)

(4) Slightly smaller (more slender?) (brunneus)

(5) Similar to frazari (Col. Desert)

(6) much smaller (brunneus)

### General size

Median frazari

7  $\frac{1}{8}$   $\frac{1}{10}$

Col. Desert

7  $\frac{2}{8}$   $\frac{8}{10}$

brunneus

6  $\frac{3}{10}$

brunneus

7  $\frac{9}{10}$

brunneus

6  $\frac{1}{10}$

brunneus

Color of iris. - iris is  
narrowly edged with white,  
yellowish white or reddish  
brown (brunneus)  
no pure white; covered  
more narrowly edged  
with reddish brown.  
(brunneus)  
iris is brunneus, as in brunneus,  
with pale, as in brunneus,

bill reddish brown or buff - no white (brunneus)

iris with less of the pale color than in brunneus

iris with pure white (brunneus)

iris with brunneus to brunneus, edged with brunneus

white, brunneus on whole of brunneus (brunneus) Col. Desert

$$\begin{array}{r} 25.4 \\ 22.8 \\ \hline 2032 \\ 508 \\ \hline 308 \end{array}$$

8475-  
8531  
8620  
9447

$$\begin{array}{r}
 10529 \\
 10540 \\
 10585 \\
 10658 \\
 10659 \\
 10735 \\
 \hline
 10747
 \end{array}$$

~~9447~~ ~~9447~~



Free from yellowish yellowish, & the  
the ~~under~~ <sup>under</sup> ~~glow~~ <sup>glow</sup> ~~of~~ <sup>of</sup>  
the ~~body~~ <sup>body</sup> ~~from~~ <sup>from</sup>

under ~~body~~ <sup>body</sup> and under ~~surface~~ <sup>surface</sup> of ~~the~~ <sup>the</sup>  
the ~~body~~ <sup>body</sup> ~~with~~ <sup>with</sup> ~~pink~~ <sup>pink</sup> ~~color~~ <sup>color</sup> ~~in~~ <sup>in</sup> ~~the~~ <sup>the</sup>  
Type. (No. 1555 to 1556, U. S. N. M., <sup>(No. 1555 to 1556)</sup> ~~was~~ <sup>was</sup> ~~at~~ <sup>at</sup> ~~the~~ <sup>the</sup>  
and one of ~~the~~ <sup>the</sup> ~~other~~ <sup>other</sup> ~~than~~ <sup>than</sup> ~~the~~ <sup>the</sup> ~~others~~ <sup>others</sup>

the ~~body~~ <sup>body</sup> ~~was~~ <sup>was</sup> ~~1555 to 1556~~ <sup>1555 to 1556</sup> ~~the~~ <sup>the</sup> ~~type~~ <sup>type</sup>  
provided it is a ~~male~~ <sup>male</sup>; otherwise No.  
133730, U. S. N. M. and Seven ~~other~~ <sup>other</sup> ~~cl~~ <sup>cl</sup> ~~is~~ <sup>is</sup>  
the ~~body~~ <sup>body</sup> ~~was~~ <sup>was</sup> ~~1555 to 1556~~ <sup>1555 to 1556</sup> ~~the~~ <sup>the</sup> ~~type~~ <sup>type</sup>  
California ~~was~~ <sup>was</sup> ~~at~~ <sup>at</sup> ~~the~~ <sup>the</sup> ~~type~~ <sup>type</sup> No.

Mexican ~~was~~ <sup>was</sup> ~~at~~ <sup>at</sup> ~~the~~ <sup>the</sup> ~~type~~ <sup>type</sup> No. 1555 to 1556

Average measurements of five females,  
from the Hudson Highlands, New York: length, 17.75;  
alar expanse, 26.75; wing, 7.19; tail, 3.00; culmen,  
2.28; tarsus, 2.00; middle toe, 2.06; its claw, .34 <sup>inches</sup>





2254 ♂ ad. April 17, 1894. Seem Wells.  
500; 718; 196; 77; cul. 64; tars 55; mte 59.  
H. X. Holzner.

---

2425 ♂ ad. April 30, 1894. Unlucky Jayner.  
500; 754; 210; 77; cul 63; tars 57; mte 58

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2426<sup>c</sup> ♂ ad. do 54 " 54  
~~8~~ 484; 740; 205; 76; 63 " 54

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505; 760; 210; 85; cul. 60; Tars 55; mte 58. Iris  
chrome yellow. Feet olivaceous green above, yellow below.  
No. 9447. Page 200.

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No. 8475. ♀ juv. San Bernardino Riv. Aug. 29, 1892.  
585; 630; 185; 73; 42; 31; 44 (Page 148.)

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No. 8531. ♀. San Bernardino Riv. Sept 2, 1892  
485; 680; 200; 72; 56; 51; 61 mm. (Page 160.)

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No. 8620. ♀ juv. Johnston's Ranch, San J. of Desper, Arizona.  
Sept. 17, 1892. "Shot in a hackberry-tree, 20 miles east of  
the San Pedro River, the nearest water." no meas.

---

25  
14  
81

From fraxea and ostreatus it differs in  
larger size, much paler coloration, with much

U. S. NATIONAL MUSEUM.

REQUISITION FOR SUPPLIES.

less restriction of the pale or whitish markings. The  
metallic colors of the upper surface are wholly different

The following articles are required for official use in

of ~~one~~ one ~~fraxea~~ fraxea ~~fraxea~~ It is instantly ~~distinctly~~ distinguishable  
by the absence of white on the throat and neck; and  
I am ~~aware~~ aware ~~of~~ of its much greater size, though  
the latter is ~~very~~ very ~~paler~~ paler in coloration.

and for their proper use and safe keeping I will be responsible.

Received the above

, 189 .

Description of a New Subspecies  
of the Green Heron from the  
arid region of the interior of North  
America.

By Edgar A. Mearns, M.D.

Comparison of a series of Green  
in breeding plumage, Sagton and New Rivers,  
Hérons, from the streams of the  
Colorado Desert <sup>crossing</sup> ~~near~~ the Mexican  
Boundary line, collected by the  
writer, in April and May, <sup>1894</sup> ~~when these~~  
~~birds were in breeding plumage~~  
with specimens in similar condition  
from other regions, shows that  
the Colorado Valley forms ~~constitutes~~  
a well-marked distinct <sup>race</sup> ~~subspecies~~  
~~as an~~ of Ardea virescens as any of  
those hitherto separated as subspecies.  
Therefore, I propose to call it Ardea  
virescens anthonyi, in honor of Mr.  
A. W. Anthony, ~~of the town of~~ <sup>during recent years,</sup> San  
Diego, California, who has contributed  
\* Eighteen specimens were collected by the writer in central Arizona and border

as much as any other writer to our knowledge of the avifauna of the West, especially the ~~region~~ <sup>region</sup> ~~in the~~ Pacific Coast ~~during recent years~~.

Ardea virescens anthonyi, subsp. nov.  
Subspecific characters. — Similar to Ardea virescens of the eastern United States, but slightly larger, and paler throughout, with the light markings of the wings ~~and~~, neck and throat much less restricted, and whiter.

Type. — No. 135576, Smithsonian Institution Museum (Ex Original No., 10529), ♂ ad. Taken at Seven Wells, Salton River, on the Colorado Desert, Lower California, near monument No. , Mexican boundary line, April 12, 1894, by Dr. Edgar A. Mearns. Length, 485; alar expanse, 740; wing, 207; tail, 79; Culmen, measured from frontal feathers, 59; Tarsus, 55; middle toe and claw, 58 mm.

(over)



3

Geographic distribution. — This is a ~~bird of the~~ <sup>inhabitant of the stream</sup> arid regions of the interior. There are specimens in the Quithsonian collection from Yreka, and Sacramento, California, from the Valley of Mexico, and from Santa Esigenia, Tehuantepec. It breeds in central Arizona, on the Verde River, and was found on the Mexican boundary line, from the San Bernardino River to the Coast Range of California, in which region it <sup>was</sup> also breeding.

Comparison. — This species ~~and~~ <sup>is</sup> ~~very~~ <sup>has</sup> no close resemblance to either of the four insular forms (saturatus, frazari, brunnescens, and bahamensis) hitherto described; but, as would be pre-supposed, is most closely related to the continental species, Ardea virescens, from which it differs in being somewhat larger. <sup>It is,</sup> ~~being,~~ in fact, the largest of the forms mentioned. Pallor is its distinguishing characteristic. The usually black saggitate spots of the neck are brownish, and fewer in number. <sup>The</sup> ~~the~~

Description. ~~Pallor is an essential~~  
~~characteristic of this form.~~ <sup>very usual</sup> The ~~black~~  
~~saggitate markings of the neck are~~  
~~brownish, and fewer~~ <sup>in number</sup>. The sides of the  
neck are chestnut and rufous instead  
of glaucous bay. The green of the wings  
is yellowish bottle green <sup>the tail ~~is~~ bottle green</sup>, and the  
scapulars ~~are~~ glaucous gray. The  
under surface <sup>of body</sup> ~~of~~ and under side of  
wings, are much paler and less slaty  
than in viridescens. <sup>very pale or whitish</sup> The ~~white~~ <sup>and on the edge of the wing,</sup> ~~light~~  
edging of the wing-coverts, ~~the whitish of~~  
~~the~~ are much broader and <sup>whiter</sup> ~~paler~~. The  
whitish of the under side of the head and  
neck extends continuously from the  
bill to the end of the pectoral plumes,  
and is less invaded by the coloring of  
the sides of the neck ~~and less~~.

From Frazari\* and saturatus† it  
differs in its larger size, and much paler

\* Ardea virescens frazari Brewster, Auk, V, p. 83, 1888.

† Habitat. Near La Paz, Lower California.

\* as by Mr. O. from San Diego [Ed.]  
please use in full citation of

coloration, with much less restriction of the pale or whitish markings. The metallic colors of the upper surface are wholly different <sup>from</sup> ~~from~~ <sup>the Cuban species</sup> ~~Ardea brunneus~~ Ardea bahamensis.  
 From bahamensis\* it is readily

Ardea bahamensis Brewster, Auk, V, p. 83, 1888.  
 "Habitat. Bahamas (Rosa Cay, Watling's Island, Abaco)."

distinguished by its much greater size and different coloration, though the Bahama form is even paler; and from brunneus it may instantly be recognized by the presence

Ardea brunneus "Gundl. Mss." - Genb. Aves Cuba, p. 84, 1850. "Habitat. Cuba."

of white on the throat and neck, which is ~~absent~~ wanting in brunneus, in which the whole throat and neck are rufous brown, showing with a tinge of orange-brown on the skin.

are ~~short~~ <sup>of dimensions of this subspecies and of virescens</sup> the accompanying table of measurements, which are <sup>fresh</sup> in millimeters, from specimens measured in the field by the writer.



## LIST OF SPECIMENS COLLECTED.

REMARKS.





Division of Birds, United States  
National Museum, Washington, District  
of Columbia. September 20, 1914.

The Passenger Pigeon, Ectopistes  
migratorius is extinct!

The last known specimen died  
in the Cincinnati Zoo, and  
was received at the museum  
in the flesh at 4 P. M. To-day.

Edgar A. Mearns  
Associate in Zoology, U.S. Nat. Mus.

Gallinula chloropus group

In the Philippine Islands are two forms:—

1. The resident form with broad frontal shield
2. Winter migrants from Asia, with narrow frontal shield.



Aegialitis dubia jerdoni Legge, P. Z. L.,  
1880, p. 39. (India)

Aegialitis dubia dubia (Scopoli) also migrates  
to the Philippine Islands, where I collected  
several specimens.

In jerdoni the general size is smaller, but  
the bill and tarsus are decidedly larger.

National Museum Number	Original Number	Locality	Sex	Date (India).	Wing	Tail	Culmen	Tarsus	Collector	Remarks
		<u>Egialitis dubia jerdoni</u> Legge, P.Z.S. 1880, p. 392								
		<u>Egialitis dubia</u> (Scopoli) (Base of mandible yellow).								
210743	14845	San Miguel, Ilocos Norte, Luzon, Philippines	♂ ad	February 3, 1907	107	55	16	24	E.A. Mearns	
210742	14707	Laoag, Ilocos Norte, Luzon, Philippines	♂ ad	January 19, 1907	107	57.5	15.5	24.5		
211287		Davao, Mindanao, Philippines	♂ ad	May 17, 1908	108	57	16	25	Paul Bartsch	
113352	9	Mehadee-ghat, India	♂ ad	-	103	54	13	21.5	A. Anderson	
114486	1117	Talee River, Seoul, Korea	♂ ad	June 25, 1883	112	56	13	22.5	C.S. Jory	
210741	14688	Laoag, Ilocos Norte, Luzon, Philippines	- ad	January 16, 1907	108	58	16	24	E.A. Mearns	
191938	13334	Digan, Mindanao, Philippine Islands	♀ ad	February 15, 1904	108	57.5	15	24	E.A. Mearns	
191939	13335	do	♀ ad	do	109.5	54.5	15.5	24	do	



(~~245~~) 218

Hydrochelidon lariformis  
aurantiacensis.

3228 ♂ juv. Aug. p. 170.

(~~246~~) 219

Podiceps

4303 — Nov. p. — ?

(~~217~~) 220

Corymbus torquatus.

3414 ♂ juv. Oct. p. 431.

(~~243~~) 216

Mergus serrator

2946 ♀ ad. May p. 42

(~~214~~)

Fulix marila

3753 ♀ ad. Febr. p. 324

3754 ♂ juv. Febr. p. 324

(~~242~~) 215

Mergus merganser americanus

3628 ♂ juv. Dec. p. — 62

3737 ♂ ad. Jan. p. 317.

(~~244~~) 217

Lophodytes  
Mergus cucullatus.

3603 ♂ juv. Nov. p. 239.

3731 ♂ ad. Jan. p. 282

3757 ♀ ad. Febr. p. 324

4158 ♀ ad. Aug. p. — ?

4338 ♀ ad. Dec. p. 79

(~~210~~) 213

Neltion carolinensis

3667 ♂ ad. Dec. p. 274

3670 ♀ ad. Jan. p. 275

3729 ♂ ad. Jan. p. 314.

3736 ♀ ad. Jan. p. 317.

3816 ♀ ad. March p. 334

3834 ♀ ad. March p. 339

3835 ♀ ad. March p. 339

4198 ♀ ad. Sept p. —

4199 ♀ ad. Sept "

4200 ♂ juv. Sept. "

(~~207~~) 210

Spatula clypeata.

3733 ♂ juv. Jan. p. 316

4269 ♂ ad. Nov. p. —

(~~208~~ 209) 211+212

Querquedula discors and

Querquedula cyanoptera.

2656 ♂ ad. March p. 5-6

3270 ♂ juv. Aug. p. 183

3348 — Sept. p. 211

4219 ♂ juv. Sept. p. — ?

4220 ♀ ad. Sept. p. — ?

~~4269 ♂ ad. March p. —~~

(~~205~~) 208

Dafila acuta.

3732 ♂ ad. Jan. p. 316

3735 ♀ ad. Jan. p. 317

4201 ♂ juv. Sept. p. — ?

(~~206~~) 209

Marca americana

3690 ♂ ad. Jan. p. 278.

3734 ♂ ad. Jan. p. 316.

(203) 206

Anas boschas

- 3684 ♀ ad. Jan. p. 277.  
 3698 ♂ ad. Jan. h. 282  
 3699 ♀ ad. Jan. p. 282  
 3760 ♂ ad. Febr. p. 325  
 4317 ♂ ad. Dec. p. —?  
 4318 ♂ ad. " " "  
 4319 ♀ ad. " " "  
 4320 ♀ ad. " " "  
 4333 ♂ ad. " " "  
 4334 ♀ ad. " " "  
 4335 ♀ ad. " " "

(204) 207

Chauletasaurus streperus

- 3888 ♀ ad. April 5. p. 4

(200) 203

Porzana carolina

- 3300 ♂ juv. Sept. p. 194

(201) 204

Gallinula galeata

- 3356 ♀ ad. Sept. p. 225  
 3477 - juv. (Nov.) p. 232  
 4181 ♀ ad. Aug. p. —?

(202) 205

Fulica americana

- 3633 ♀ ad. Dec. p. 266  
 3759 ♂ ad. Febr. p. 326  
 3766 ♂ ad. Febr. p. 326  
 3829 ♀ ad. March p. 337

(199) 202

Recurvirostra americana

- 4229 ♀ ad. Sept. p. —?  
 4230 ♂ ad. " " "  
 4231 ♂ ad. " " "  
 4232 ♂ ad. " " "  
 4233 ♂ ad. " " "  
 4234 ♀ ad. " " "

(196) 199

Tringoides macularius

- 2855 - ♀ ad. May p. 80  
 2875 - ♂ ad. May p. 83  
 3197 - juv. Aug. p. 165  
 3226 ♂ ad. Aug. p. 176  
 3279 ♂ juv. Sept. p. 188  
 3299 ♂ juv. Sept. p. 194  
 3317 ♀ juv. Sept. p. 202  
 3350 ♂ juv. Sept. p. 212  
 3423 ♀ juv. Oct. p. 431  
 3625 - ♀ ad. Dec. p. 262  
 4120 ♂ ad. July p. —?  
 4123 ♂ juv. July p. —?  
 4124 ♀ juv. July p. —?  
 4125 ♀ juv. July p. —?  
 4130 ♂ pullus July p. —?  
 4186 ♀ juv. Aug. p. —?

(194) 197

Rhyacophilus solitarius

- 4180 ♀ ad. Aug. p. —?

(196) 198

Symphemia semipalmata

- 3202 ♀ ad. Aug. p. 166  
 4119 ♀ ad. July p. —?

➤ 199

(197) 199 200

Numenius longirostris

- 4261 ♀ ad. Oct. p. —?

(198) 201

Steganopus wilsoni

- 3192 ♀ (juv.?) Aug. p. 164  
 4137 ♀ ad. July p. —?

(192) 195

Oreunetes pusillus occidentalis

- 4188 ♀ ad. Sept. p. —?  
 4189 ♀ ad. " " "  
 4191 ♀ ad. " " "  
 4192 ♂ ad. " " "  
 4193 ♂ ad. " " "

(193) 196

Lotanus melanoleucus

- 3425 - ♀ ad. Oct. p. 431  
 4145 - ♀ ad. July p. —?  
 4153 ♂ ad. Aug. p. —?  
 4238 ♀ ad. Oct. p. —?  
 4314 ♀ ad. Dec. p. —?



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Actodromas minutilla.

3233 ♂ (ad.?) Aug. p. 178.  
 3234 ♀ (ad.?) Aug. p. 178.  
 3289 ♀ ad. Sept. p. 193  
 3290 ♀ — Sept. p. 194  
 4183 ♂ ad. Aug. p. —?  
 4184 ♀ ad. " " —?  
 4185 ♂ ad. " " —?  
 4196 ♂ ad. Sept. " —?

190 193

Actodromas bairdii

3235 ♀ (ad.?) Aug. p. 179.  
 3236 ♀ (ad.?) Aug. p. 179.  
 3288 ♂ ad. Sept. p. 193  
 3311 ♀ — Sept. p. 199  
 3312 ♂ — Sept. p. 199  
 3313 ♀ — Sept. p. 199  
 3314 ♂ — Sept. p. 199  
 4182 ♂ ad. Aug. p. —?  
 4190 ♀ ad. Sept. p. —?

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Podasocys montana.

3287 ♀ (ad.?) Sept. 8 p. 193.

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Hellinago media wilsoni

3356 ♂ ad. Sept. p. 225.  
 3606 ♂ ad. Dec. p. 242  
 3607 ♂ ad. Dec. p. 242  
 3810 ♂ ad. March p. 333  
 4252 ♀ ad. Oct. p. —?

(185) 188

Antaius loculator.

4213 ♀ ad. Sept. p. —?  
 4216 — ad. Sept. p. —?  
 4222 ♂ ad. Sept. p. —?  
 4223 ♀ ad. Sept. "  
 4224 ♂ ad. Sept. "

(184) 187

Butorides virens.

3241 ♂ juv. Aug. p. 180  
 3341 ♀ ad. Sept. p. 209  
 3434 ♂ juv. Oct. p. 431.  
 4133 ♀ juv. July p. —?  
 4134 ♀ ad. July p. —?  
 4135 ♀ juv. July p. —?  
 4187 ♂ ad. Aug. p. —?  
 4225 ♂ ad. Sept. p. —?

(181) 184

Herodias alba egretta

4138 — ad. July p. —?  
 4139 ♂ ad. " "  
 4140 ♂ (ad.?) " "  
 4141 ♀ (ad.?) " "

(186) 189

Plegadis falcinellus.

4226 ♂ ad. Sept. p. —?  
 4227 ♂ juv. " "  
 4228 ♀ juv. " "

(182) 185-

Gargetta candidissima

4014 ♂ ad. May p. 12

(183) 186

Dichromanassa rufa

3349 ♀ — Sept. p. 211.

(180) 183

Aardea herodias

3215 - juv. Aug. p. 172.  
 3330 ♀ juv. Sept. p. 206  
 3426 ♀ ad. Oct. p. 431.  
 4114 ♂ ad. July p. —?  
 4136 ♀ ad. July p. —?  
 4143 ♀ juv. July p. —?  
 4144 ♀ juv. July " "  
 4214 ♂ ad. Sept. p. —?  
 4359 ♂ ad. Dec. p. 81.

(157)  
Bubo virginianus  
subarcticus.

3285 ♂ ad. Sept. p. 190  
 3669 ♀ ad. Dec. p. 274.  
 3671 ♀ ad. Jan. p. 275-  
 3685 ♀ ad. " " 277  
 3686 ♂ ad. " " 277  
 3687 ♀ ad. " " 277  
 3755 ♂ ad. Febr. " 324  
 3803 ♂ ad. March " 332  
 4197 ♂ ad. Sept. p. —?  
 4221 ♀ ad. Sept. p. —?  
 4262 ♀ ad. Oct. p. —?  
 4263 ♀ ad. Oct. p. —?  
 4358 ♀ ad. Dec. p. —?

(182) (179)  
Cyrtonyx montezumae  
macroura.

3361 ♀ juv. Oct. p. 430  
 3362 ♂ juv. " " 430  
 3363 ♂ juv. " " 430  
 3724 ♀ ad. Jan. p. 314  
 4264 ♀ ad. Nov. p. —?  
 4270 ♂ ad. Nov. p. —?  
 4325 ♂ ad. Dec. p. —?  
 4343 ♀ ad. Dec. p. —?

(178) 179

Melospiza gallopavo

3644 ♀ ad. Dec. p. 267.  
 3720 ♀ ad. Jan. p. 313

(178) 181

Callipepla squamata

3894 ♂ ad. April p. 4  
 3895 ♂ ad. April p. 4  
 3897 ♀ ad. April p. 4  
 3898 ♂ ad. April p. 4  
 3899 ♀ ad. April p. 4  
 3906 ♂ ad. April p. 6  
 3907 ♂ ad. April p. 6  
 3908 ♀ ad. April p. 6  
 3909 ♂ ad. April p. 6  
 3952 ♂ ad. April p. 8  
 3969 ♂ ad. May p. 8  
 3973 ♂ ad. May p. 8  
 3974 ♂ ad. May p. 8  
 3975 ♀ ad. May p. 10

(176) 177

Chamaepeia passerina

3621 ♂ ad. Dec. p. 258  
 4028 ♂ ad. May p. 12.  
 4029 ♂ ad. May p. 12.  
 4030 ♂ ad. May p. 12.

(176) 178

Scardafella inca.

3855 ♀ ad. March p. 2  
 3856 ♀ ad. March p. 2  
 4033 ♂ ad. May p. 12  
 4034 ♂ ad. May p. 12  
 4035 ♂ ad. May p. 12  
 4036 ♂ ad. May p. 12  
 4037 ♀ ad. May p. 12  
 4038 ♀ ad. May p. 12  
 4235 ♂ ad. Oct. p. —?  
 4246 ♂ ad. Oct. p. —?  
 4247 ♀ ad. Oct. p. —?

(174) 176 176

Melospiza cinerea

3976 ♀ ad. May p. 10  
 3977 ♂ ad. May p. 10  
 3978 ♂ ad. May p. 10  
 3979 ♂ ad. May p. 10  
 3980 ♀ ad. May p. 10  
 3981 ♂ ad. May p. 10  
 3992 ♂ ad. May p. 10  
 3999 ♂ ad. May p. 10  
 4013 ♂ ad. May p. 12  
 4022 ♀ ad. May p. 12  
 4039 ♂ ad. May p. 12  
 4053 ♂ ad. May p. 14  
 4058 ♀ ad. May p. 14  
 4060 ♀ ad. May p. 14



~~(169)~~ 171  
Merulopodius antirraemia  
3354 ♀ ad. Sept. p. 225  
4103 ♀ ad. June p. — ?  
4104 ♂ juv. June p. — ?

~~(170)~~ 172  
Aquila chrysaetos canadensis  
4337 ♂ ad. Dec. p. 24479

~~(171)~~ 173  
Cathartes aura.  
3137 ♂ ad. July p. 145-  
3204 ♀ ad. Aug. p. 167  
3357 ♂ ad. Sept. p. 225-

~~(161)~~  
Hierofalco mexicanus  
polyagris.  
4082 ♀ ad. June p. — ?

~~(162)~~  
Falco peregrinus naevius  
3203 — juv. Aug. p. 166  
3320 ♂ juv. Sept. p. 203  
3991 ♂ ad. May p. 10  
4111 ♂ pullus. July p. — ?  
4112 ♀ pullus. July p. — ?  
4115 ♂ juv. July p. — ?  
4150 ♀ ad. July p. — ?

~~(168)~~  
Epulon columbianus.  
3365 ♀ juv. October p. 430

~~(167)~~ 169  
Buteo abbreviatus  
2945 ♂ juv. May p. 42  
4047 ♀ ad. May p. 14  
4048 ♂ ad. May p. 14  
4050 ♀ ad. May p. 14

~~(168)~~ 170  
Buteo swainsoni  
3176 ♀ ad. July p. 152  
3199 — juv. Aug. p. 165-  
3200 — juv. Aug. p. 166  
3213 — Aug. p. 169  
3214 — Aug. p. 169  
4127 ♀ ad. July p. — ?

~~(158)~~  
Speotyto cunicularia  
hypogaea  
3180 ♂ juv. Aug. p. 158  
3181 ♂ juv. " p. 158  
3910 ♀ ad. April p. 6  
3968 ♂ ad. May p. 8

~~(159)~~  
Glaucidium gnoma.  
2664 ♀ ad. March p. 57

~~(160)~~  
~~(169)~~  
Glaucidium phalaenoides  
4006 ♀ ad. May p. 10.

~~(167)~~ 167  
Accipiter fuscus.  
2820 ♀ ad. May p. 75-  
3366 ♀ juv. Oct. p. 430  
3448 ♂ juv. Oct. p. 432  
3480 ♂ ad. November p. 245-  
3626 ♀ ad. Dec. p. 262  
3713 ♀ ad. Jan. p. 312  
4239 ♂ juv. Oct. p. — ?  
4240 ♂ juv. Oct. p. — ?  
4339 ♀ ad. Dec. p. 79.

~~(155)~~  
Scops asio trichopsis  
2982 ♂ ad. June p. 5-3  
4003 ♂ juv. May p. 10.  
4004 ♀ juv. May p. 10.  
4006 ♂ juv. May p. 10.  
4067 ♀ juv. May p. 14  
4068 ♂ juv. May p. 14  
4083 ♂ ad. June p. — ?  
4110 ♀ ad. July p. — ?



(169) 171  
Merulopitanga antioxiensis  
3354 ♀ ad. Sept. p. 225  
4103 ♀ ad. June p. — ?  
4104 ♂ juv. June p. — ?

(170) 172  
Aquila chrysaetos canadensis  
4337 ♂ ad. Dec. p. 24479

(171) 173  
Cathartes aura  
3137 ♂ ad. July p. 145-  
3204 ♀ ad. Aug. p. 167  
3357 ♂ ad. Sept. p. 225-

(161)  
Hierofalco mexicanus  
polyagris  
4082 ♀ ad. June p. — ?

(162)  
Falco peregrinus naevius  
3203 — juv. Aug. p. 166  
3320 ♂ juv. Sept. p. 203  
3991 ♂ ad. May p. 10  
4111 ♂ pullus. July p. — ?  
4112 ♀ pullus. July p. — ?  
4115 ♂ juv. July p. — ?  
4150 ♀ ad. July p. — ?

(168)  
Epulon columbianus  
3365 ♀ juv. October p. 430

(167) 169  
Buteo abbreviatus  
2945 ♂ juv. May p. 42  
4047 ♀ ad. May p. 14  
4048 ♂ ad. May p. 14  
4050 ♀ ad. May p. 14

(168) 170  
Buteo swainsoni  
3176 ♀ ad. July p. 152  
3199 — juv. Aug. p. 165-  
3200 — juv. Aug. p. 166  
3213 — Aug. p. 169  
3214 — Aug. p. 169  
4127 ♀ ad. July p. — ?

(158)  
Speotyto cunicularia  
hypogaea  
3180 ♂ juv. Aug. p. 158  
3181 ♂ juv. " p. 158  
3910 ♀ ad. April p. 6  
3968 ♂ ad. May p. 8

(159)  
Glaucidium gnoma  
2664 ♀ ad. March p. 57

(160)  
(169)  
Glaucidium phalaenoides  
4006 ♀ ad. May p. 10.

(167) 167  
Accipiter fuscus  
2820 ♀ ad. May p. 75-  
3366 ♀ juv. Oct. p. 430  
3448 ♂ juv. Oct. p. 432  
3480 ♂ ad. November p. 245-  
3626 ♀ ad. Dec. p. 262  
3713 ♀ ad. Jan. p. 312  
4239 ♂ juv. Oct. p. — ?  
4240 ♂ juv. Oct. p. — ?  
4339 ♀ ad. Dec. p. 79.

(155)  
Scops asio trichopsis  
2982 ♂ ad. June p. 53  
4003 ♂ juv. May p. 10.  
4004 ♀ juv. May p. 10.  
4006 ♂ juv. May p. 10.  
4067 ♀ juv. May p. 14  
4068 ♂ juv. May p. 14  
4083 ♂ ad. June p. — ?  
4110 ♀ ad. July p. — ?

(154)

Aluco lamprous americanus

- 2960 - ad. May p. 46  
 3156 ♀ juv. July p. 148  
 4142 ♀ juv. July p. —?  
 4146 ♂ ad. July p. —?  
 4147 ♀ juv. July p. —?  
 4149 ♀ juv. July p. —?  
 4326 ♀ ad. Dec. p. —?

(153)

Coccyzus americanus

- 2979 ♀ ad. June p. 52.  
 3132 ♀ ad. July p. 143  
 4121 ♂ ad. " p. —?  
 4128 ♂ ad. " p. —?

(152)

Coccyzus californianus

- 2725 ♂ ad. April p. 63  
 3601 ♂ ad. Nov. p. 238  
 3661 ♂ ad. Dec. p. 270  
 4065 ♂ ad. May p. 14  
 4109 ♀ pullus July p. —?  
 4118 ♂ pullus " p. —?  
 4313 ♀ ad. Nov. p. —?  
 4323 ♂ ad. Dec. p. —?

Colaptes auratus hybridus

(150)

Colaptes chrysoides

- 3873 ♂ ad. April p. 4  
 3883 ♂ ad. April p. 4.  
 3900 ♂ ad. April p. 4  
 3990 ♂ ad. May p. 10  
 4007 ♀ ad. May p. 10  
 4008 ♀ juv. May p. 10  
 4027 ♂ juv. May p. 12  
 4041 ♂ juv. May p. 12  
 4042 ♀ juv. May p. 12  
 4043 ♂ juv. May p. 12  
 4061 ♀ juv. May p. 14  
 4064 ♀ ad. May p. 14  
 4071 ♂ juv. May p. 14

(149)

Colaptes auratus mexicanus

- 2673 ♂ ad. March p. 57  
 2775 ♀ ad. April p. 70  
 3347 ♂ ad. Sept p. 210  
 3358 ♂ ad. " " 226  
 3359 ♀ ad. " " 226  
 3412 ♂ ad. Oct. " 431  
 3630 ♂ ad. Dec. " 266  
 3631 ♂ ad. " " "  
 3668 ♂ ad. " " 274  
 3679 ♂ ad. Jan. " 276  
 3793 ♀ ad. Febr. " 330  
 3805 ♀ ad. March " 332  
 4126 ♀ juv. July p. —?  
 4282 ♀ ad. Nov. p. —?  
 4316 ♀ ad. Dec. p. —?  
 4357 ♂ ad. Dec. p. —?

(143)

Sphyrapicus varius ruber

- 3406 ♂ ad. Oct. p. 431

(144)

Sphyrapicus thyroideus

- 3377 ♂ ad. Oct p. 430  
 3526 ♂ ad. Nov. p. 250  
 3700 ♀ ad. Jan p. 282 & 310



(142)  
Sphyrapicus varius  
nuchalis

2645 ♂ ad. March p. 56  
3379 ♂ juv. Oct. p. 430  
3387 ♂ ad. Oct. p. 430  
3422 ♂ juv. " p. 431  
3721 ♂ ad. Jan. p. 313  
3722 ♂ juv. " p. 313  
3728 ♂ juv. " p. 314  
4255 ♂ juv. Oct. p. —?

(139)  
Picus villosus harrisi

2674 ♂ ad. March p. 57  
2675 ♀ ad. " p. 57  
3371 ♂ ad. Oct. p. 430  
3479 ♂ ad. Nov. p. 245-  
3500 ♀ ad. " p. 247  
3548 ♂ ad. " p. 252  
3594 ♀ ad. " p. 235-  
3714 ♀ ad. Jan. p. 312  
4161 ♂ — Aug. p. —?

(138)  
Chordeiles acutifemur  
texensis

2866 ♂ ad. May p. 82  
3031 ♂ ad. June p. 115  
3061 ♂ ad. " p. 122  
3096 ♂ ad. July p. 136  
4000 ♂ ad. May p. 10  
4075 ♂ ad. June p. ?  
4076 ♀ ad. " p. ?

(140)  
Picus pubescens gairdneri

3383 ♂ ad. Oct. p. 430

(130)  
Trochilus alexandri

2739 ♂ ad. April p. 65  
3056 ♂ ad. June p. 121  
3205 ♂ ad. Aug. p. 168  
3206 ♂ ad. " " "  
3207 ♂ ad. " " "  
3216 ♂ ad. " " 173  
3217 ♂ ad. " " "  
3218 ♂ ad. " " "  
3219 ♂ ad. " " "  
3229 ♂ ad. " " 177  
3230 ♂ ad. " " "  
3971 ♂ ad. May " 8  
4069 ♀ ad. " " 14  
4073 ♀ ad. June p. —?  
4074 — " " "

(125-128)  
Empidonax 4 sp. sp.

2726 ♂ ad. April p. 64  
2741 — ad. " p. 65-  
2938 ♀ ad. May p. 41  
2951 ♂ ad. " p. 45-  
2971 — June p. 50  
2983 ♂ ad. " p. 53  
2988 ♂ ad. " p. 101  
2989 ♀ ad. " p. 101  
3166 ♀ ad. July p. 150  
3195 ♀ ad. Aug. p. 165-  
3303 ♀ — Sept. p. 195-  
3398 ♀ ad. Oct. p. 431  
4168 — ad. Aug. p. —?  
4209 Ex? Sept. p. —?

(106)  
Osturus microcephalus

2818 ♀ ad. May p. 75-  
2840 ♂ ad. " p. 78  
2865 ♂ ad. " p. 81  
2894 ♂ ad. " p. 25-  
2895 ♀ ad. " p. "  
2908 ♂ ad. " p. 26  
2909 ♂ ad. " p. "  
2910 ♂ ad. " p. "  
2911 ♂ ad. " p. "  
2942 ♂ ad. " p. 41  
2963 ♀ ad. June p. 50  
3022 ♂ ad. " p. 112  
3073 ♂ juv. " p. 125-  
4087 ♂ juv. May June p. —?





~~(187)~~ 180  
Oxyechus vociferus.

2685 ♂ ad. March. p. 5-8.  
2714 ♂ ad. April p. 62  
2715 ♀ ad. April p. 62  
2716 ♂ ad. April p. 62  
2823 ♀ ad. May p. 76  
2832 ♂ ad. May p. 77.  
3007 - ad. June p. 104  
3008 ♂ juv. June p. 104  
3009 ♀ juv. June p. 104  
3185 ♀ juv. Aug. p. 160  
3198 — Aug. p. 165-  
3237 ♂ ad. Aug. p. 170  
3254 ♀ juv. Aug. p. 181  
3255 ♀ juv. Aug. p. 181  
3256 ♂ juv. Aug. p. 181.  
3333 ♀ — Sept. p. 206  
3353 ♀ ad. Sept. p. 212  
3360 ♀ ad. Sept. p. 227  
3608 ♀ ad. Dec. p. 242  
3624 ♂ ad. Dec. p. 262

~~(177)~~ 180 "A"  
Lophortyx gambeli.

2649 ♀ ad. March. p. 56  
2650 ♀ ad. " " "  
2651 ♀ ad. " " "  
2665 ♂ ad. " " 57  
2679 ♂ ad. " " 58  
2682 ♂ ad. " " "  
2683 ♀ ad. " " "  
2686 ♂ ad. " " "  
2744 ♀ ad. April " 66  
2755 ♂ ad. " " 67  
2756 ♂ ad. " " 67  
2786 ♂ ad. " " 71.  
2787 ♀ ad. " " "  
2788 ♂ ad. " " "  
2789 ♂ ad. " " 72  
2790 ♂ ad. " (over) "

~~(177)~~ 180 "B"  
Lophortyx gambeli.

3175 ♂ ad. July p. 152  
3189 ♀ juv. Aug p. 164  
3190 ♂ juv. Aug p. 164  
3191 ♀ (juv.?) Aug p. 164  
3282 ♂ juv. Sept. p. 189  
3283 ♀ juv. Sept. p. 189  
3307 ♂ juv. Sept p. 197  
3337 ♂ ad. Sept p. 209  
3502 ♂ ad. Nov. p. 247  
3503 ♂ ad. Nov. p. 248  
\* {3494 ♂ ad. Nov. p. 247  
3493 ♂ ad. " p. 247  
3634 ♀ ad. Dec. p. 266  
3655 ♀ ad. Dec. p. 269  
3660 ♀ ad. Dec. p. 269  
3692 ♂ ad. Jan. p. 279.  
3693 ♂ ad. Jan. p. 279.

(166) 168

Buteo borealis calurus.

2718 ♂ juv. April. p. 62  
3351 ♀ juv. Sept. p. 212  
3352 ♂ juv. Sept. p. 212  
3378 ♀ ad. Oct. p. 430  
3325 ♂ ad. Nov. p. 250  
3593 ♀ juv. Nov. p. 235-  
3694 ♀ ad. Jan. p. 281.  
3822 ♀ ad. March p. 336  
3836 ♀ ad. March p. 2  
3887 ♀ juv. April p. 4  
3996 ♀ juv. May p. 10.  
3997 ♂ juv. May p. 10.  
4066 ♀ juv. May p. 14  
4173 ♂ juv. Aug. p. —  
4174 ♀ juv. Aug. p. —  
4178 ♂ juv. Aug. p. —  
(over)

(172) 174

Columba fasciata

3373 - ad Oct. p. 430  
3392 ♂ ad. Oct. p. 430  
4105 ♀ ad June p. —?

(173) 175.

Zenaidura carolinensis

2684 - ad. March p. 5-8.  
2733 ♂ ad. April p. 64  
2849 ♀ ad. May p. 79  
2850 ♂ ad. May p. 80  
2966 ♂ ad. June p. 50  
2967 ♂ ad. June p. 50  
3141 ♂ pullus July p. 145-  
3392 ♂ ad. Oct. p. 430  
3620 ♀ ad. Dec p. 258

(1653) 165-

Circus hudsonius.

3258 ♂ (brown). Aug p. 182  
3335 ♀ (brown) Sept. p. 207  
3435 ♂ (brown) Oct. p. 431  
3487 ♂ juv. (brown). Nov. p. 246  
3488 ♂ (ad?) (brown) " p. 246  
3489 (♂ ad?) (brown) " p. 246  
4212 — juv? (brown) Sept. p. —  
4315 ♂ ad. (blue) Dec. p. —?

~~(164)~~ 166  
Accipiter cooperi

2825 ♂ juv. May p. 76  
3227 ♂ juv. Aug p. 176  
3321 ♀ juv. Sept p. 203  
3329 ♂ juv. Sept. p. 205-  
3342 ♀ juv. Sept. p. 210  
3462 ♂ ad. Oct. p. 432  
4108 ♀ juv. June p. —?  
4157 ♂ juv. Aug. p. —?  
(over)



Oxyechus - continued

3650 ♂ ad. Dec. p. 268  
 3651 ♂ ad. Dec. p. 268  
 3794 ♀ ad. Febr. p. 330  
 3795 ♂ ad. Febr. p. 330  
 3796 ♀ ad. Febr. p. 331  
 3797 ♂ ad. Febr. p. 331  
 3809 ♂ ad. March p. 333  
 3811 ♀ ad. March p. 333  
 3812 ♂ ad. March p. 334  
 3955 ♂ ad. April p. 8  
 3956 ♀ ad. April p. 8  
 4095 ♂ pullus June p. —  
 4096 ♂ pullus June p. —  
 4097 ♀ pullus June p. —  
 4129 ♂ pullus July p. —  
 4172 ♂ ad. Aug. p. —  
 14 ad males  
 9 ad females  
 2 yg females

2791 ♂ ad. April p. 72  
 2792 ♀ ad. " p. 72  
 2795 ♂ ad. " " "  
 2796 ♂ ad. " " "  
 2836 ♀ ad. May " 77  
 2881 ♂ ad. " " 23  
 2882 ♂ ad. " " "  
 2883 ♀ ad. " " "  
 2884 ♂ ad. " " "  
 3021 ♂ ad. June " 111  
 3091 ♀ ad. July " 135  
 3092 ♂ juv. July " 135  
 3093 ♂ juv. July " 135  
 3094 ♂ juv. July " 136  
 3095 ♂ juv. July " 136  
 3138 ♂ pullus July p. 145  
 3139 ♂ pullus July p. 145  
 3140 ♀ pullus July p. 145  
 3151 ♂ pullus July p. 146  
 3152 ♂ pullus July p. 146

3696 ♂ ad. Jan. p. 281.  
 3723 ♂ ad. Jan. p. 313  
 3831 ♀ ad. March p. 339  
 3832 ♀ ad. March p. 339  
 3902 ♀ ad. April p. 4  
 3958 ♂ ad. April p. 8  
 4081 ♀ pullus June p. —  
 4116 ♂ pullus July p. —  
 4117 ♂ pullus July p. —  
 4287 ♀ ad. November p. —  
 4290 ♂ ad. Nov. p. —  
 4332 ♂ ad. Dec. p. —  
 4353 ♂ ad. Dec. p. —

4215 ♀ juv. Sept. p. —  
 4241 ♂ juv. Oct. p. —  
 4253 ♂ juv. Oct. p. —  
 4336 ♀ juv. Dec. p. —  
 4361 ♂ ad. Dec. p. 84

Zenaidura

3827 ♀ ad. March p. 337  
 3951 ♀ ad. April p. 8

4202 ♂ juv. Sept. p. —

<sup>163</sup>164  
Tringoides phaeopus

2666 ♀ ad. March p. 57  
2687 ♂ ad " " 58  
2732 ♂ ad. April " 64  
2771 ♀ ad. " " 69  
2793 ♀ ad. " " 72  
2811 ♀ ad " " 74  
2812 ♀ ad. " " 74  
2822 ♂ ad. May " 76  
2833 ♀ ad " " 77  
2834 ♂ ad. " " 77  
2835 ♀ ad. " " 77  
2902 ♂ ad. " " 26  
2944 ♂ ad. " " 42  
3128 ♂ juv July p. 143  
3129 ♀ juv July p. 143  
3310 ♂ — Sept. p. 199  
3322 ♀ juv. Sept. p. 203  
3323 ♂ ad. Sept. p. 203

(151)  
Ceryle alcyon

3280 ♂ ad. Sept. p. 188  
3318 ♀ ad. " p. 203  
3336 ♂ ad. " p. 209  
3343 ♀ ad. " p. 210  
3344 — " p. 210  
3345 ♂ — " p. 210  
3346 — " p. 210  
3609 ♂ — Dec. p. 242  
3778 ♂ ad. Feb. p. 328  
3821 ♂ ad. Mar. p. 336  
4148 ♀ ad. July p. —  
4195 ♂ ad. Sept. p. —  
4360 ♀ ad. Dec. p. 81.

(147)  
Melanerpes formicivorus  
bairdii

2661 ♀ ad. March p. 56  
2662 ♂ ad " " 57  
2663 ♂ ad. " " 57  
2766 ♂ ad. April p. 69  
2774 ♂ ad. " " 70  
2913 ♂ ad May p. 37  
~~3102 ♀ juv July p. 127~~  
3275 ♀ ad. Sept p. 185  
3276 ♂ ad. " " "  
3277 ♂ ad. " " "  
3278 ♂ ad. " " "  
3399 ♀ ad. Oct " 431.  
3467 — ad. " " 432  
3468 ♀ ad. " " "  
3555 ♀ ad. Nov. " 253  
3647 ♀ ad. Dec " 268.

(146)  
Melanerpes torquatus

3364 ♂ ad. Oct. p. 430  
3369 — ad. " " "  
3370 — " " "  
3390 ♂ ad. " " "  
3391 — " " "  
3395 ♂ ad. " " "  
3396 ♀ ad. " " "  
3397 ♂ ad. " " 431  
3400 ♂ ad. " " "  
3401 ♂ ad. " " "  
3443 ♂ ad. " " 432  
3444 ♂ juv. " " "  
3458 — juv. " " "  
3469 ♂ ad. " " 432  
3470 ♂ ad " " 432  
3515 ♀ ad. Nov. " 249  
3521 ♂ ad. " " 249.

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Centurus uropygialis

3415 ♀ ad. Oct. p. 431.  
3418 ♀ ad. " " "  
3419 ♂ ad. " " "  
3420 ♂ ad. " " "  
3421 ♂ ad. " " "  
3429 ♂ ad. " " "  
3430 ♀ ad. " " "  
3431 ♀ ad " " "  
3445 ♂ ad. " " 432  
3446 ♂ ad. " " "  
3447 ♂ ad. " " "  
3454 ♂ ad. " " "  
3456 ♀ ad " " "  
3459 ♀ ad " " "  
3460 ♂ ad. " " "  
3844 ♂ ad. March " 2  
3874 ♂ ad. April " 4  
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Geothlypis trichas

2813 ♀ ad May p. 74  
2814 ♀ ad. " " "  
2993 ♀ ad. June p. 103  
3015 ♀ ad " p. 110  
3208 ♂ — Aug. p. 168  
3209 — " " "  
3210 ♂ juv. " " "  
3211 ♂ juv. " " "  
3212 ♀ — " " "  
3220 ♂ — " " 173  
3221 ♂ — " " "  
3222 ♂ — " " "  
3223 ♀ — " " "  
3224 ♀ juv. " " "  
3231 ♀ — " " 177  
3232 ♀ — " " "  
3238 ♂ juv " " 179  
3239 ♀ — " " "  
3242 ♂ ad. " " 180  
3243 ♂ juv. " " "



3324 ♂ juv. p. 204  
 3325 ♂ juv. p. 204  
 3334 ♂ juv. p. 207  
 3411 ♂ ad. Oct. p. 431.  
 3424 ♂ ad. Oct. p. 431  
 3436 ♀ juv. Oct. p. 432  
 3501 ♂ ad. Nov. p. 247  
 3617 ♂ ad. Dec. p. 244  
 3632 ♂ ad. Dec. p. 266  
 3756 ♀ ad. Febr. p. 324  
 3758 ♂ ad. Febr. p. 324  
 3775 ♂ ad. Febr. p. 327  
 3804 ♀ ad. March p. 332  
 3830 ♀ ad. March p. 339  
 3833 ♀ ad. March p. 339  
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 4324 ♀ ad. Dec. p. —

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*Eremophila alpestris*  
*Chrysolaema.*  
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 2759 ♂ ad. " "  
 2760 ♀ ad. " "  
 3159 ♀ juv. July p. 149.  
 3168 ♂ juv. " p. 151.  
 3491 ♂ ad. Nov. p. 246  
~~3813 ♂ ad. March p. 334~~  
 3919 ♀ ad. April p. 6  
 3957 ♂ ad. " p. 8.  
 4107 ♂ ad. June p. —  
 4306 ♀ ad. Nov. p. —  
 4321 ♂ ad. Dec. p. —  
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4160 ♂ ad. Aug. p. —?

3522 ♀ ad. Nov. p. 249  
 3536 ♀ ad. " p. 251  
 3543 ♂ ad. " p. 252  
 3546 ♂ juv. " p. "  
 3549 ♂ ad. " p. "  
 3557 ♂ ad. " p. 253  
 3558 ♀ ad. " p. "  
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 3560 ♂ juv. " p. "  
 3561 ♂ juv. " p. — 254  
 3562 ♀ ad. " p. — 233  
 3563 ♂ ad. " p. — "  
 3564 ♀ ad. " p. — "  
 3565 ♀ juv. " p. — "  
 3837 ♀ ad. Mar. p. — 2  
 3903 ♀ ad. Apr. p. — 4

4018 ♂ ad. May p. 12  
 4023 ♂ ad. May " "  
 4024 ♀ ad. " " "  
 4025 ♂ ad. " " "  
 4026 ♀ ad. " " "

3244 ♂ juv. Aug. p. 180  
 3245 ♀ ad. " " "  
 3246 ♂ juv. " " "  
 3247 ♂ juv. " " "  
 3248 ♀ ad. " " "  
 3249 ♀ ad. " " "  
 3250 ♀ — " " "  
 3251 ♀ — " " "  
 3252 ♀ — " " 181  
 3253 ♀ ad. " " "  
 3261 ♂ juv. " " 183  
 3262 ♂ juv. " " "  
 3263 ♀ — " " "  
 3264 ♀ — " " "  
 3265 ♀ ad. " " "  
 3266 ♀ ad. " " "  
 3284 ♂ juv. Sept. p. 189  
 4094 ♀ ad. June p. —  
 4174 — Aug. p. —?

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*Agelaius phoeniceus*

2654 ♀ ad. March p. 56  
 3504 ♂ ad. Nov. p. 248  
 3743 ♂ ad. Febr. p. 323  
 3744 ♂ juv. " " "  
 3745 ♀ ad. " " "  
 3746 ♀ ad. " " "  
 3747 ♀ ad. " " "  
 3762 ♀ ad. " " 326  
 3763 ♀ ad. " " "  
 3764 ♀ ad. " " "  
 3781 ♀ ad. " " 329  
 3782 ♀ ad. " " "  
 3783 ♀ ad. " " "  
 3784 ♀ ad. " " "  
 3785 ♀ ad. " " "  
 3807 ♀ ad. March " 333  
 3808 ♀ ad. " " " over

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*Tyrannus vociferans*

3083 ♀ ad. July p. 131.  
 3142 ♂ ad. " p. 145  
 3160 ♀ juv. " p. 149  
 3170 ♂ ad. " p. 151

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*Myiarchus mexicanus cooperi*

4151 ♂ ad. Aug. p. —?  
 4152 ♀ ad. " p. —?

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*Myiarchus cinerascens*

2721 ♂ ad. April p. 63  
 2848 — ad. May p. 79  
 2877 ♂ ad. " " 83  
 2962 ♀ ad. June p. 50  
 3004 — ad. " p. 104  
 3014 ♂ ad. " p. 108  
 3087 ♀ juv. July p. 135  
 3122 ♂ ad. July p. 140  
 3939 ♂ ad. April p. 6  
 3961 ♂ ad. " p. 8

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*Sayornis sayi*

2728 ♂ ad. April p. 64  
 3079 — juv. July p. 130  
 3259 ♀ ad. Aug p. 182  
 3475 ♂ ad. Oct p. 230  
 3622 ♂ ad. Dec p. 258  
 3654 ♂ ad. Dec p. 268  
 3656 ♂ ad. " p. 269.  
 3680 ♀ ad. Jan p. 276  
 3786 ♀ ad. Febr. p. 330  
 3787 ♂ ad. " p. 330  
 3798 ♀ ad. March p. 331

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*Sayornis nigricans*

2711 ♀ ad. April p. 61.  
 2729 ♂ ad. " " 64  
 2852 — ad. May " 80  
 3049 ♀ ad. June " 120  
 3177 ♂ juv. Aug. " 153.  
 3302 ♀ ad. Sept " 195.



3854 ♂ ad. Mar. 6. 2  
 3866 ♂ ad. Apr. 1. 22  
 4019 ♂ ad. Mar. 12  
 4329 ♀ ad. Dec. 1. 77  
 4330 ♀ ad. " 1. 77  
 4354 ♀ ad. " " 80  
 4355 ♀ ad. " " "  
 4356 ♀ ad. " " "

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Apelocoma woodhousei  
 2652 ♀ ad. March. 1. 5-6.  
 2659 ♀ ad. " " "  
 2670 ♀ ad. " " 57  
 2757 ♂ ad. April " 67  
 2772 ♀ ad. " " 69  
 2773 ♂ ad. " " "  
 2782 ♂ ad. " " 71  
 2783 ♀ ad. " " "  
 2784 ♂ ad. " " "  
 2984 ♀ ad. June " 55  
 3274 ♂ juv. Sept. " 185  
 3409 ♀ ad. Oct. " 431

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Corvus frugivorus  
 3368 — Oct. 1. 430

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Picicorvus columbianus  
 3374 ♂ ad. Oct. 1. 430

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Apelocoma sordida  
arizonae.  
 3388 ♀ ad. Oct. 1. 430  
 3389 ♂ ad. " "  
 3393 ♂ ad. " "

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Symnecitta cyanocephala  
 3338 ♂ ad. Sept. 1. 209  
 3339 ♀ ad. " 1. 209  
 3407 ♂ ad. Oct. 1. 431  
 3408 ♀ ad. " " "  
 3583 ♀ ad. Nov. 1. 233  
 3584 ♀ ad. " " 234  
 3585 ♀ ad. " " "  
 3586 ♀ ad. " " "  
 3712 ♀ ad. Jan " 312

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Corvus corax canutus  
 2644 ♂ ad. March. 1. 5-6  
 3174 ♂ juv. July 1. 152

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Corvus cryptoleucus  
 3911 ♂ ad. April 1. 6  
 3912 ♀ ad. " " "  
 3918 ♀ ad. " " "  
 3924 ♀ ad. " " "

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*Picus scalaris*

- 2680 ♀ ad. March. p. 5-8.  
 2742 ♂ ad. April p. 65-  
 2804 ♀ ad. April p. 73  
 2829 ♀ ad May p. 76  
 2893 ♂ ad. " p. 25-  
 3059 ♂ ad. June p. 121.  
 3077 ♂ juv. July p. 129  
 3102 ♀ juv. July p. 137  
 3135 ♂ juv. July p. 145-  
 3340 ♀ ad. Sept. p. 210  
 3605 ♀ ad. Dec p. 240  
 3623 ♀ ad. " p. 25-8  
 3740 ♂ ad. Jan. p. 320  
 3761 ♂ ad. Febr. p. 327  
 3772 ♂ ad. " p. "  
 3773 ♀ ad. " p. "  
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*Pyrocephalus rubineus*  
*mexicanus*

- 2700 ♂ ad. April p. 60  
 2701 ♂ ad. " "  
 2702 ♀ ad. " "  
 2703 ♀ ad. " "  
 2730 ♂ ad. " p. 64  
 2731 ♂ ad.  
 2806 ♂ ad. April p. 73  
 3016 ♀ ad. June p. 111  
 3153 ♂ ad. July p. 148.  
 3164 ♀ ad. July p. 150  
 3165 ♀ ad. July p. 150  
 3193 ♂ ad. Aug. " 164  
 3194 ♂ juv. " 165-  
 3281 ♂ juv. Sept. " 189  
 3455 ♂ ad. Oct. " 432  
 3843 ♂ ad. March " 2

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*Contopus borealis*

- 4012 ♀ ad. May p. 12  
 4167 — ad. Aug p. —?

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*Contopus richardsoni*

- 2914 ♂ ad. May p. 37.  
 3301 ♀ juv. Sept p. 195-  
 3327 ♂ ad. Sept p. 204  
 3332 ♂ juv. Sept p. 206

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*Geothlypis*  
*cyanocephalus*

- 2653 ♀ ad. March p. 56  
 2708 ♂ ad. April p. 61.  
 2803 ♂ ad. " p. 73  
 3652 ♀ ad. Dec p. 268  
 3765 ♀ ad. Febr. p. 326  
 3934 ♂ ad. Apr. p. 6



3788 ♀ ad. Febr. p. 330  
 3789 ♂ ad. " "  
 3790 ♂ ad. " "  
 3791 ♂ ad. " "  
 3792 — " "  
 4248 ♂ ad. Oct p. —?  
 4294 ♂ ad. Nov. p. —?

3885 ♂ ad. April p. 4.  
 3890 ♂ ad. " " 4  
 3891 ♀ ad. " " 4  
 3904 — " " 4  
 3983 ♂ ad. May " 10  
 4088 ♂ ad. June " —?  
 4131 ♂ ad. July " —?  
 4132 ♀ ad. " " —?  
 4217 ♂ juv Sept p. —?

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*Cyanocitta stelleri*  
macrolopha.

2667 ♂ ad. March p. 57  
 2668 ♂ ad. " " "  
 2669 ♀ ad. " " "  
 2767 ♀ ad. April " 69  
 2780 ♂ ad. " " 70  
 2781 ♂ ad. " " 71  
 3381 ♀ ad. Oct. p. 430  
 3382 ♀ ad. " p. "  
 3556 ♀ ad. Nov p. 253  
 3719 ♀ ad. Jan p. 313  
 3725 ♀ ad. " p. 314